Thomas L. Lipke and Jason M. Urckfitz LOCKING PIN MECHANISM FOR A VANE-TYPE CAM PHASER Docket No.: 89190.029904/DP-311742 Sheet 1 of 7

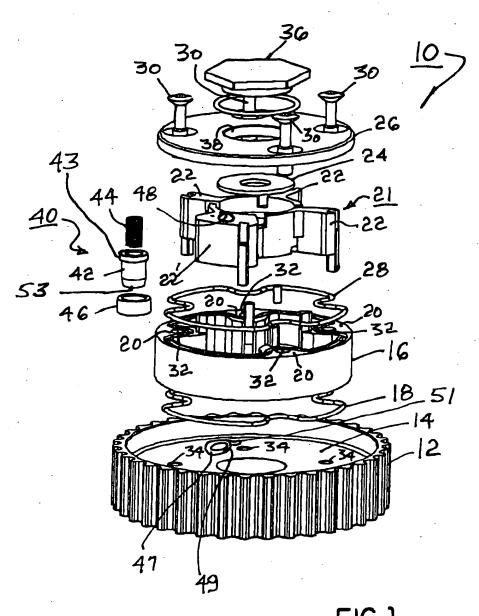
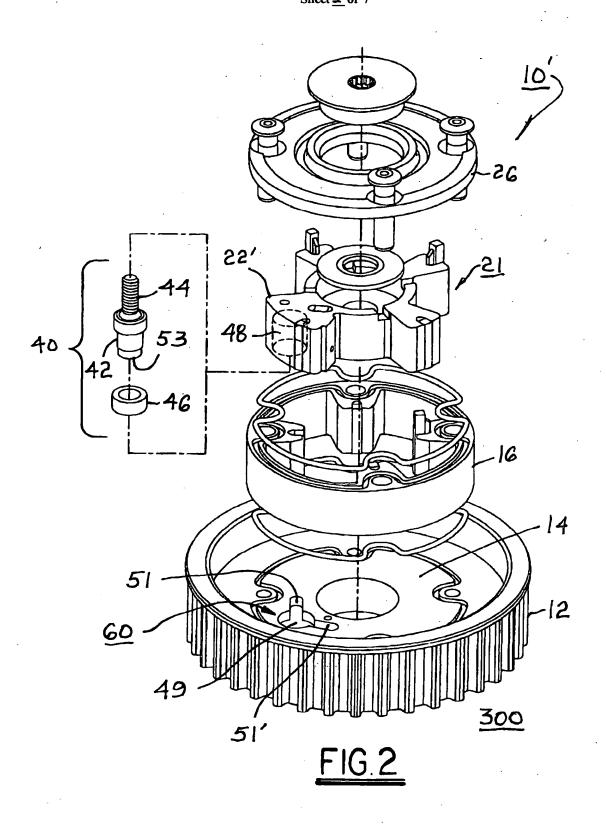


FIG. 1
(PRIOR ART)

Thomas L. Lipke and Jason M. Urckfitz LOCKING PIN MECHANISM FOR A VANE-TYPE CAM PHASER Docket No.: 89190.029904/DP-311742 Sheet <u>2</u> of 7



Thomas L. Lipke and Jason M. Urckfitz LOCKING PIN MECHANISM FOR A VANE-TYPE CAM PHASER Docket No.: 89190.029904/DP-311742 Sheet 3 of 7

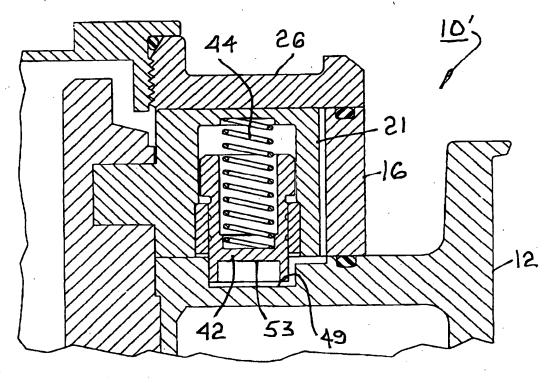
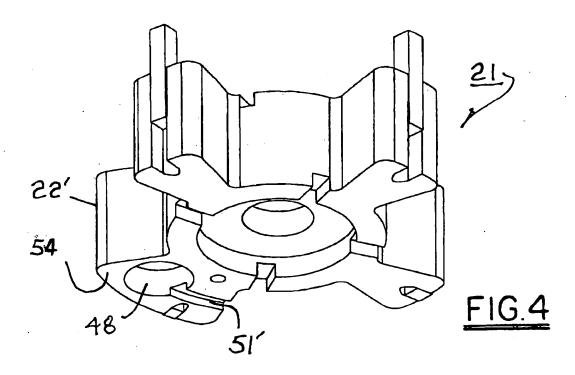
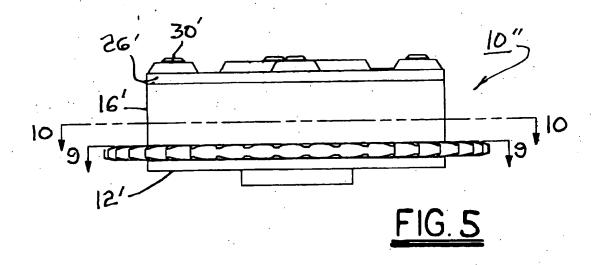
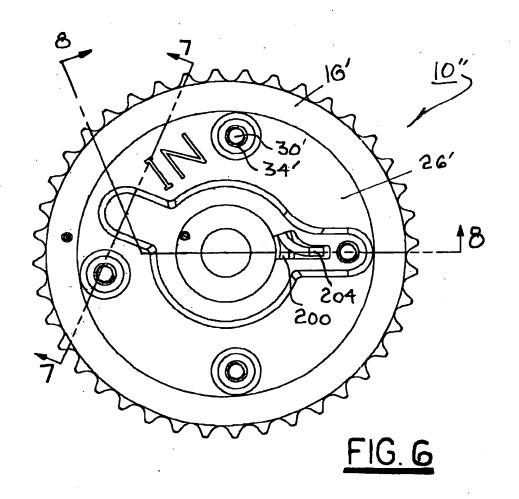


FIG. 3

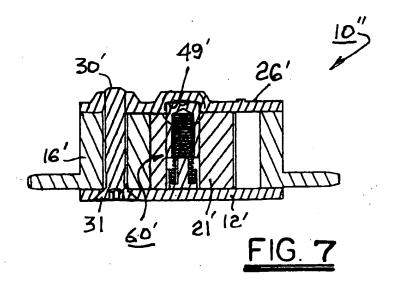


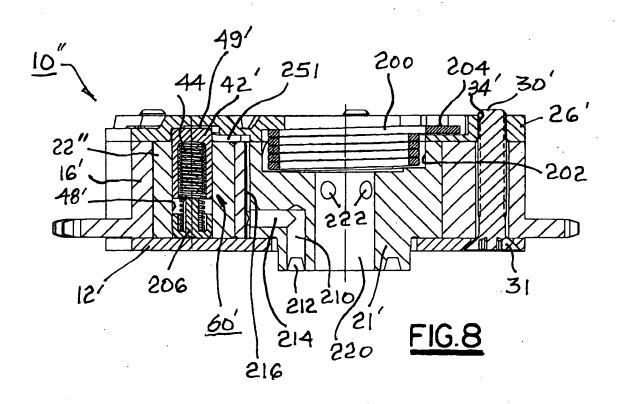
Thomas L. Lipke and Jason M. Urckfitz LOCKING PIN MECHANISM FOR A VANE-TYPE CAM PHASER Docket No.: 89190.029904/DP-311742 Sheet 4 of 7



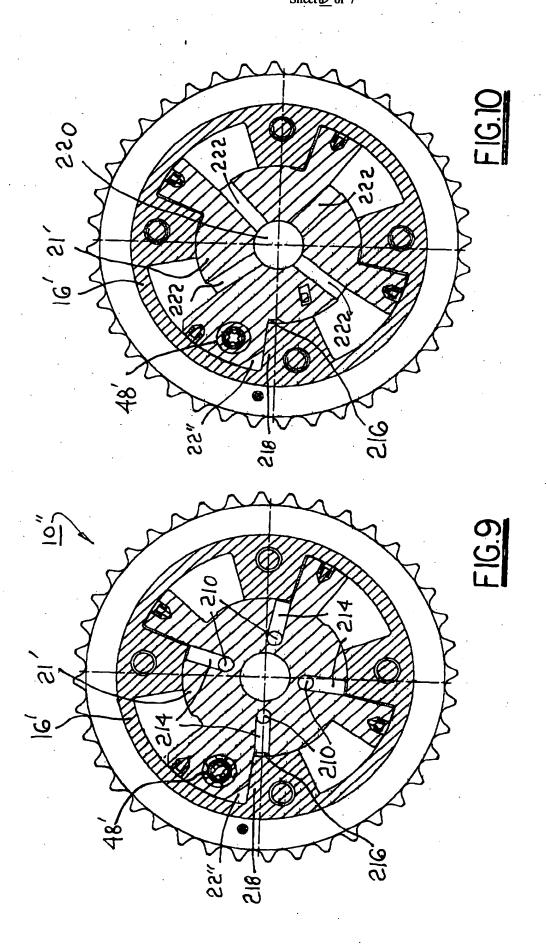


Thomas L. Lipke and Jason M. Urckfitz LOCKING PIN MECHANISM FOR A VANE-TYPE CAM PHASER Docket No.: 89190.029904/DP-311742 Sheet_5_ of 7





Thomas L. Lipke and Jason M. Urckfitz LOCKING PIN MECHANISM FOR A VANE-TYPE CAM PHASER Docket No.: 89190.029904/DP-311742 Sheet 6 of 7



Thomas L. Lipke and Jason M. Urckfitz LOCKING PIN MECHANISM FOR A VANE-TYPE CAM PHASER Docket No.: 89190.029904/DP-311742 Sheet 7 of 7

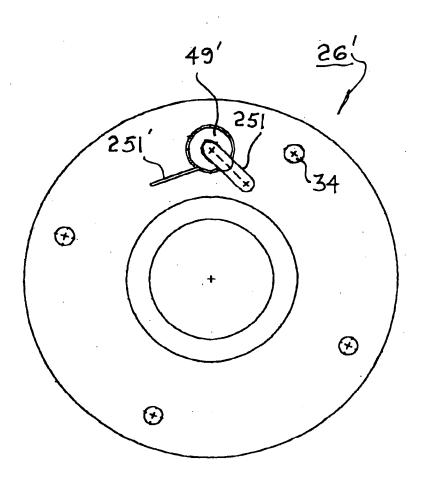


FIG.11